UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,775	12/05/2003	Thomas Kruse		3395

7590 10/02/2006

Arthur W. Fisher, III
Suite 316
5553 West Waters Avenue
Tampa, FL 33634

EXAMINER	
WHITE, RODNEY BARNETT	
ART UNIT	**PAPER NUMBER**
3636	

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/729,775	KRUSE ET AL.	
	Examiner	Art Unit	
	Rodney B. White	3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2 and 11-31* is/are rejected.

7)☒ Claim(s) *3-10,32 and 33* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 18 is objected to because of the following informalities: In claim 18, line 3, "f" should be - - of - -. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Stoeckl et al (U.S. Patent No. 5,015,035).

Stoeckl et al teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 20 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration (See Figures 1-10 and specification at column 3, lines 38-59, column 6, lines 41-48, and column 7, lines 14-25).

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Nivet (U.S. Patent No. 6,731,088 B2).

Nivet teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the

powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 50 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration (See Figures 1-3 and specification at column 5, lines 34-39 and column 7, lines 31-36).

Claims 1-2, 11-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Austin, Jr. et al (U.S. Patent No. 5,190,349).

Austin, Jr. et al teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 402 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded

independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, 1 wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration, wherein said microprocessor receives an input control signal to control the direction of travel of the seat positioning mechanism and calculates the distance of travel of the seat positioning mechanism to determine the new seat position and wherein said microprocessor receives an input control signal to control the direction of travel of the back rest positioning mechanism and calculates the distance of travel of the back rest positioning mechanism to determine the new back rest position.. (See Figures 1-17 and specification).

Claims 1, 11-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Pulver (U.S. Patent No. 6,425,635 B1).

Pulver teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, 1 wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt

positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration, wherein said microprocessor receives an input control signal to control the direction of travel of the seat positioning mechanism and calculates the distance of travel of the seat positioning mechanism to determine the new seat position and wherein said microprocessor receives an input control signal to control the direction of travel of the back rest positioning mechanism and calculates the distance of travel of the back rest positioning mechanism to determine the new back rest position.. (See Figures 1-9 and specification).

Claims 1-2 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Werner et al (U.S. Patent No. 4,278,290).

Werner et al teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration,

wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, 1 wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration. (See Figures 1-5 and specification).

Claims 1-2 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Babbs (U.S. Patent No. 4,470,632).

Babbs teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, 1 wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt

positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration. (See Figures 1-10 and specification).

Claims 1-2 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Winogrocki (U.S. Patent No. 4,695,682).

Winogrocki teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 20 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes

means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration. (See Figures 1-6 and specification).

Claims 1-2 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gonser et al (U.S. Patent No. 5,214,360).

Gonser et al teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 30 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration,

wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration. (See Figures 1-7 and specification).

Claims 1-2, 11-16, and 18-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Krebs et al (U.S. Patent No. 5,340,953).

Krebs et al teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 20 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly

including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration, wherein said means to determine the position of the seat is a pressure sensor operatively disposed relative to the seat and said means to determine the position of the back rest is a pressure sensor operatively disposed relative to the back rest to sense the pressure on the seat and the back rest to generate a signals in response to the pressures therein indicative of the position of the seat and back rest respectively. (See Figures 1-8 and specification).

Claims 1-2, 11-15, 17, and 19-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchiyama (U.S. Patent No. 2002/0113477 A1).

Uchiyama teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the

carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration. (See Figures 1-8 and specification).

Claims 1-2, 11-16, and 18-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurze (U.S. Patent No. 5,884,350).

Kurze teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the

powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 20 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration, wherein

said means to determine the position of the seat is a pressure sensor operatively disposed relative to the seat and said means to determine the position of the back rest is a pressure sensor operatively disposed relative to the back rest to sense the pressure on the seat and the back rest to generate a signals in response to the pressures therein indicative of the position of the seat and back rest respectively. (See Figures 1-8 and specification).

Claims 1-2, 11-15, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Torres (U.S. Patent No. 6,068,280).

Torres teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with

respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration, it is inherent that the Torres has left and right leg rests sine it is a wheelchair. (See Figures 1-3 and specification).

Claims 1-2, 11-15, 17, and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Petrofsky et al (U.S. Patent No. 4,421,336).

Petrofsky et al teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position

the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration, wherein said microprocessor receives an input control signal to control the direction of travel of the seat positioning mechanism and calculates the distance of travel of the seat

positioning mechanism to determine the new seat position and wherein said microprocessor receives an input control signal to control the direction of travel of the back rest positioning mechanism and calculates the distance of travel of the back rest positioning mechanism to determine the new back rest position, further including a leg rest positioning mechanism comprising a left and right leg rest positioning assembly to position a pair of leg rest supports, wherein said input control selectively generates a coordinated back rest and leg rest support positioning signal fed to said microprocessor to control said left and right leg rest positioning assemblies and said recline positioning mechanism to extend the leg rest supports as the back rest reclines and to retract the leg rest supports as the back rest inclines, wherein the speed of operation of said leg rest positioning mechanism is independent of the speed of operation of said recline positioning mechanism such that said leg rest positioning assemblies extend and retract in a coordinated movement with the back rest., wherein movement ofthe leg rest supports are synchronized to maintain the right and left legs at the same height. (See Figures 1-16 and specification).

Claims 1-2 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Brooks (U.S. Patent No. 5,467,002).

Brooks teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the

powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 82 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration, wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the

seat and recline of the back rest respectively to change the seat configuration. (See Figures 1-15 and specification).

Claims 1-2, 11-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Krebs et al (U.S. Patent No. 5,267,778).

Krebs et al teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 402 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded

independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration, wherein said microprocessor receives an input control signal to control the direction of travel of the seat positioning mechanism and calculates the distance of travel of the seat positioning mechanism to determine the new seat position and wherein said microprocessor receives an input control signal to control the direction of travel of the back rest positioning mechanism and calculates the distance of travel of the back rest positioning mechanism to determine the new back rest position. (See Figures 1-17 and specification).

Claims 1-2, 11-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Vergin (U.S. Patent No. 5,751,129).

Vergin teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 106 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration wherein said system control includes a means to determine the position of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said seat positioning mechanism comprises a seat tilt positioning assembly

including a linear actuator and wherein said back rest positioning mechanism comprises a back rest recline positioning assembly including a linear actuator to tilt the seat and recline of the back rest respectively to change the seat configuration, wherein said microprocessor receives an input control signal to control the direction of travel of the seat positioning mechanism and calculates the distance of travel of the seat positioning mechanism to determine the new seat position and wherein said microprocessor receives an input control signal to control the direction of travel of the back rest positioning mechanism and calculates the distance of travel of the back rest positioning mechanism to determine the new back rest position. (See Figures 1-9 and specification).

Claims 1-2, 11-14, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Welterin et al (U.S. Patent No. 6,055,877).

Welterin et al teaches a seating control system to selectively position and monitor the configuration of the seat and back rest of a powered wheelchair including a seat and a back rest adjustably supported on a carriage having a drive mechanism to power the powered wheelchair, said seating control system comprises a seat positioning mechanism and a back rest positioning mechanism to selectively position the seat and the back rest relative to the carriage and a system control including an input control and a microprocessor 460 to control, monitor and record the position of the seat and the back rest relative to the carriage and to selectively retrieve the recorded seat configuration wherein said system control includes a means to determine the position

of the seat and to generate a seat position signal indicative of the position of the seat relative to the carriage and a means to determine the position of the back rest and to generate a back rest position signal indicative of the position of the back rest relative to the carriage, wherein the position of the seat and back rest are recorded independently with respect to time, wherein the position of the seat and back rest are recorded independently with respect to duration, wherein said system control includes means to activate said seat and back rest positioning mechanisms in a predetermined pattern to the reposition of the occupant's body and limbs with respect to time, wherein said system control includes means to determine the position of said seat positioning mechanism relative to the carriage and to generate a seat position signal in response thereto and means to determine the position of said back rest positioning mechanism relative to the carriage and to generate a back rest position signal in response thereto, wherein said microprocessor receives an input control signal to control the direction of travel of the seat positioning mechanism and calculates the distance of travel of the seat positioning mechanism to determine the new seat position and wherein said microprocessor receives an input control signal to control the direction of travel of the back rest positioning mechanism and calculates the distance of travel of the back rest positioning mechanism to determine the new back rest position (See Figures 1-4C and specification).

Claims 3-10 and 32-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murphy, Nivet et al, Ferry, Vang et al, Nivet, Hakansson, and Wilson teach structures similar to the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney B. White whose telephone number is (571) 272-6863. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rodney B. White,
Patent Examiner
Art Unit 3636
September 22, 2006

Rodney B. White

RODNEY B. WHITE
PRIMARY EXAMINER